1873MNRAS..33..498H

existence of a little shoal crossing the pole in lines generally parallel to the meridian from 1^h to 13^h R.A. On the second night of the Laurentius stream this year (1853), there was a marked increase in the number seen; seven were marked down, while others flew through the field too quickly to be caught. As I also perceived increased activity on several cold and windy nights, these minute telescopic meteors appear to consist of two classes, like their larger brethren, those of the naked eye, namely, one of a cosmical and one of an electrical origin."

In addition to Mr. Carrington's observations, telescopic meteors have been occasionally seen by other observers. A few interesting notes on the subject are inserted in the last Annual Report.—E. D.

Elements and Ephemeris of Tempel's Comet of Short Period.

By J. R. Hind, Esq.

Having obtained very satisfactory observations of this comet at Mr. Bishop's Observatory, Twickenham, on May 22, I have used the resulting place, with the positions determined by M. Stéphan at Marseilles on April 3 and May 1, in the calculation of an orbit, taking all the small corrections into account. The elements are as follows:—

Perihelion Passage 1873, May 9·74218 M.T. at Greenwich.

Longitude of Perihelion ..	238° 1′ 6″·0	M. Eq. 1873·0.
Ascending Node	78 43 18·9	
Inclination	9 45 49·1	
Angle of Excentricity	27 31 14·6	
Log Semi-axis Major	0·5173827	
Mean daily Sidereal Motion ..	594″·19987	

Motion direct.

On comparing with an observation at Marseilles, on May 23, with which I have been favoured by M. Stéphan, the differences between the calculated and observed places were found:—

In R.A. −5″·8 In N.P.D. +8″·2.

Later observations taken at Mr. Bishop's Observatory are also closely represented.

The following ephemeris applies to the next period of absence of moonlight, when the comet may be still followed with large telescopes:—

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At Greenwich, Midnight.

1873.	True R.A. h m s	True N.P.D. ° ′ ″	Log Δ
June 12	16 17 43·6	109 54 36	9·90129
13	17 16·4	110 5 12	
14	16 50·7	110 15 46	9·90538
15	16 26·6	110 26 18	
16	16 4·0	110 36 48	9·90984
17	15 43·0	110 47 16	
18	15 23·7	110 57 40	9·91466
19	15 6·0	111 8 1	
20	14 50·1	111 18 19	9·91982
21	14 36·0	111 28 33	
22	14 23·7	111 38 44	9·92529
23	16 14 13·3	111 48 51	
24	16 14 4·9	111 58 53	9·93106
25	13 58·4	112 8 51	
26	13 53·9	112 18 45	9·93711
27	13 51·5	112 28 34	
28	13 51·1	112 38 19	9·94342
29	13 52·8	112 47 59	
30	13 56·7	112 57 34	9·94996
July 1	14 2·7	113 7 5	
2	14 10·8	113 16 31	9·95671
3	14 21·1	113 25 53	
4	14 33·6	113 35 10	9·96365
5	14 48·3	113 44 22	
6	16 15 5·3	113 53 30	9·97077

When the Moon is again absent in the latter part of July, the comet's track is found to be:—

0h Greenwich.	R.A. h m s	N.P.D. ° ′	Log Δ	$\frac{1}{r^2\Delta^2}$
July 16	16 19 29	115 15·7	0·00641	0·279
20	16 22 15	115 48·0	0·02203	0·257
24	16 25 32	116 18·5	0·03797	0·236
28	16 29 18	116 47·4	0·05408	0·216
Aug. 1	16 33 32	117 14·8	0·07024	0·198
5	16 38 13	117 40·8	0·08639	0·181

In 1867 Dr. Julius Schmidt observed the comet at Athens till the intensity of light had diminished to 0·2. There is consequently a possibility that it might be seen in July in the present year at one or other of the Observatories of the Southern Hemisphere. The Melbourne reflector in particular might be expected to show it.

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